

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:**1.-14. (cancelled)**

15. **(currently amended)** A recombinant organism comprising a PCR-mediated gene replacement vector comprising:

- (a) a λ exo and a λ bet nucleotide sequences encoding bacteriophage λ Red recombinase;
- (b) a λ gam nucleotide sequence encoding bacteriophage anti-RecBCD;
- (c) a *Ptac* promoter sequence operably linked to the nucleotide sequence of (a) and (b); and
- (d) a nucleotide sequence encoding LacI operably linked to its native promoter; and
- (e) at least one origin of replication sequence which confers low copy number on the vector,

wherein the recombinant organism is a pathogenic species the vector of any one of claims 9-14.

16.-20. (cancelled)

21. **(currently amended)** The pathogenic species recombinant organism of claim 15 ~~claim 20~~ which is a pathogenic *Escherichia coli*.

22. **(currently amended)** The pathogenic species recombinant organism of claim 21 which is enterohemorrhagic *E. coli* (EHEC) or enteropathogenic *E. coli* (EPEC).

23. **(currently amended)** The pathogenic species recombinant organism of claim 15 which is of the genus *Pseudomonas*.

24. (currently amended) The pathogenic species recombinant organism of claim 23, which is *Pseudomonas aeruginosa*.

25. (currently amended) The pathogenic species recombinant organism of claim 15 which is of the genus *Mycobacterium*.

26. (currently amended) The pathogenic species recombinant organism of claim 25, which is *Mycobacterium tuberculosis*.

27. – 43. (cancelled)

44. (new) The vector of claim 15, wherein the at least one origin of replication sequence is temperature sensitive.

45. (new) A recombinant organism comprising a PCR-mediated gene replacement vector comprising:

- (a) a λ *exo* and a λ *bet* nucleotide sequences encoding bacteriophage λ Red recombinase;
- (b) a λ *gam* nucleotide sequence encoding bacteriophage anti-RecBCD;
- (c) a *P_{tac}* promoter sequence operably linked to the nucleotide sequence of (a) and (b); and
- (d) a nucleotide sequence encoding LacI operably linked to its native promoter; and
- (e) at least one origin of replication sequence which confers low copy number on the vector,

wherein the recombinant organism is enterohemorrhagic *E. coli* (EHEC) or enteropathogenic *E. coli* (EPEC).

46. (new) A recombinant organism comprising a PCR-mediated gene replacement vector comprising:

- (a) a λ *exo* and a λ *bet* nucleotide sequences encoding bacteriophage λ Red recombinase;
- (b) a λ *gam* nucleotide sequence encoding bacteriophage anti-RecBCD;

- (c) a *Ptac* promoter sequence operably linked to the nucleotide sequence of (a) and (b); and
- (d) a nucleotide sequence encoding LacI operably linked to its native promoter; and
- (e) at least one origin of replication sequence which confers low copy number on the vector,

wherein the recombinant organism is *Pseudomonas aeruginosa*.

47. (new) A recombinant organism comprising a PCR-mediated gene replacement vector comprising:

- (a) a λ *exo* and a λ *bet* nucleotide sequences encoding bacteriophage λ Red recombinase;
- (b) a λ *gam* nucleotide sequence encoding bacteriophage anti-RecBCD;
- (c) a *Ptac* promoter sequence operably linked to the nucleotide sequence of (a) and (b); and
- (d) a nucleotide sequence encoding LacI operably linked to its native promoter; and
- (e) at least one origin of replication sequence which confers low copy number on the vector,

wherein the recombinant organism is *Mycobacterium tuberculosis*.